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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,652	11/16/2001	David J. Green	0325.00488	2156

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CHRISTOPHER P. MAIORANA, P.C.
24840 HARPER
ST. CLAIR SHORES, MI 48080

EXAMINER	
EHICHIOYA, FRED I	

ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/992,652	GREEN ET AL.	
	Examiner	Art Unit	
	Fred I. Ehichioya	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 10, and 21 - 30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 8, 10, 21, 22, and 30* is/are rejected.

7)☒ Claim(s) *9 and 23 - 29* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicants' arguments, with respect to claims 1 – 10, and 21 – 30 filed February 13, 2004 have been fully considered but they are not persuasive for the following reasons.

2. Applicants argue:

(a) "The asserted motivation appears to be merely a conclusory statement" (Page 10, Para 1).

(b) The references appear to be non-analogous art. MacCristen has a primary U.S. classification of 375/122. In contrast, Keller has a primary U.S. classification of 716/14. (Page 10, Para 2).

3. Examiner respectfully disagrees with all of the allegations as argued. Examiner, in his previous office action, pointed out exact locations in the cited prior art.

In response to Applicants' argument (a): The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. In re Linter, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972)

In response to Applicants' argument (b): The examiner must determine what is "analogous prior art" for the purpose of analyzing the obviousness of the subject matter at issue. "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).* See also *In re Deminski, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986); In re Clay, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992)* ("A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem."); Therefore, MacCristen and Keller though classified in different classifications are reasonably pertinent to the field of invention.

4. In view of the above, the examiner contends that all limitations as recited in the claims have been addressed in this Office Action. For the above reasons, Examiner believed that rejection of the last Office action was proper.

Claim Objections

5. Claims 9, and 23 - 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 2, 22 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,635,855 issued to Howard Y. M. Tang in view of U.S. Patent 6,138,229 issued to Kayhan Kucukcakar et al (hereinafter "Kucukcakar").

Regarding claims 1 and 30, Tang teaches a method of generating a file suitable for programming a programmable logic device, the method comprising the steps of:

A) generating a programming item from a plurality of parameters that define a program for said programmable logic device (see column 1, line 62 through column 2, line 30 and column 8, lines 55 – 58);

(B) compressing said programming item to present a compressed item (see column 8, lines 25 – 28);

(C) storing said programming item in a programming field of said file in response to generating (see column 5, lines 13 – 27); and

(D) storing said compressed item in a non-programming field of said file in response to compressing (see column 8, lines 29 - 38).

Tang does not explicitly teach programming field and non-programmable field.

Kucukcakar teaches programming field (see column 5, lines 50 – 53) and non-programmable field (see column 3, lines 25 – 47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify teaching of Kucukcakar with the teaching of Tang wherein the stored programmable and non-programmable fields supply control signal to the programmable logic device. The motivation is that these data fields make it easy and quick for a user to program the PLD.

Regarding claim 2, Kucukcakar teaches the step of storing at least one of said parameters in a second non-programming field of said file (see column 5, line 67 thru column 6, line 3).

Regarding claim 22, Tang teaches said file is compatible with a Joint Electron Device Engineering Council JESD3-C standard (see column 8, lines 25 – 62).

8. Claims 3, 4, 5, 6, 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang in view of Kucukcakar and further in view of U.S. Patent 6,121,903 issued to Nir Kalkstein (hereinafter "Kalkstein").

Regarding claim 3, Tang or Kucukcakar does not explicitly teach the step of generating a dictionary for compressing prior to compressing said programming item.

Kalkstein teaches the step of generating a dictionary for compressing prior to compressing said programming item (see column 11, lines 47 - 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify teaching of Kalkstein with the teaching of Tang and Kucukcakar wherein the dictionary contains programmable items that are building blocks for the input texts. The motivation is that the dictionary contains a series of mappings between the original data and the compressed representations of the actual data.

Regarding claim 4, Kalkstein teaches wherein said dictionary is generated independently of said compressing step (see column 2, lines 27 - 29).

Regarding claim 5, Kalkstein teaches said compressing is a Huffman encoding and said dictionary is a Huffman tree (see column 12, lines 6 - 27).

Regarding claim 6, Kalkstein teaches the step of encoding said compressed item from a binary representation to a symbol representation in response to compressing (see column 2, lines 31 - 32).

Regarding claim 7, Kalkstein teaches the step of mapping said symbol representation to a character representation in response to encoding (see column 2, lines 29 - 32).

Regarding claim 21, Kalkstein teaches the step of adding plurality of delimiters around said compressed item in said non-programmable field (see column 11, lines 47 – 65).

9. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang in view of Kucukcakar and further in view of U.S. Patent 4,730,348 issued to John E. MacCrisken (hereafter "MacCrisken").

Regarding claim 8, Tang or Kucukcakar does not explicitly teach teaches generating an error detection item; and

storing said error detection item in a second non-programming field of said file.

MacCrisken teaches generating an error detection item (see column 6, lines 39 - 49); and

storing said error detection item in a second non-programming field of said file (see column 20, lines 42 – 46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify teaching of MacCrisken with the teaching of Tang and Kucukcakar wherein error detection code is generated. The motivation is that error detection code enables the receiving system to detect whether any data was corrupted during transmission.

Regarding claim 10, MacCrisken teaches said steps (A) through (D) are stored in a storage medium as a computer program that is readable and executable by a computer to generate said file (see column 9, lines 23 – 30).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred I. Ehichioya whose telephone number is 703-305-8039. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred I. Ehichioya
Examiner
Art Unit 2172
May 11, 2004

SHAHID ALAM
PRIMARY EXAMINER